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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,948	02/01/2001	Ravishankar Rao	YOR919970410US2	8846

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IBM Corporation  
Intellectual Property Law Dept.  
P.O. Box 218  
Yorktown Heights, NY 10598

EXAMINER
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SAFAIPOUR, HOUSHANG

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/773,948

Applicant(s)

RAO ET AL.

Examiner

Houshang Safaipour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 01 February 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 9-12,32-40 and 42-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-12,32-40 and 42-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed on May 14, 2004 have been fully considered and made of record .

### ***Response to Argument***

The following is the response to applicant's arguments.

Applicant argues that support for claims 10, 33 and 37 reciting "measuring the intensity of light from the source of light transmitted through an opaque object" may be found in the specification at page 8, lines 15-20 and at page 12 lines 17-22. Examiner disagrees. Page 8 of the specification is part of the summary of the invention and basically repeats the claims limitations and there is no mention of an opaque object at page 12 lines 17-22. Examiner adds that specification (page 13 line 1-7) discloses that black signal is obtained by placing a black filter in front of the CCD. Therefore, examiner maintains the rejection of claims 10, 33 and 37 under 35 U.S.C. 112, first paragraph.

In regards to the remaining claims applicant's amendment have been fully considered but they are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 11, 12, 32, 34-36 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houchin et al. (U. S. Patent No. 5,047,861) and further in view of Ganz et al. (U.S. Patent No. 5,303,165).

Regarding claim 9, a system for scanning images, the system comprising:

means for providing light (fig. 1, light source 2);

means for measuring at a number of points on a transparent object, the intensity of light emitted from the means for providing light transmitted through the transparent object to form a first raw profile (col. 3, lines 32-56); and

means for smoothing the first raw profile to form a calibration profile to form a calibration profile (col. 3, lines 32-56). Houchin does not explicitly disclose extrapolation at ends of the profile, however, Ganz discloses the need for extrapolation at the extreme ends of the spectral range (col. 14 line 3 through col. 15 line 11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Ganz invention in Houchin,s design to further enhance the smoothing process.

Regarding claim 11, a system for scanning images as recited in claim 9, further comprising:

means for measuring the intensity of light from the light transmitted through a semi-transparent object at the number of points to form a semi-transparent object profile; and means for correcting the semi-transparent object profile using the calibration profile (col. 3, lines 32-56).

Regarding claim 12, a system for scanning images as recited in claim 11, further

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comprising means for correcting the semi-transparent object profile using the black calibration profile (col. 4, lines 5-43).

Regarding claims 32, 34 the arguments analogous to those presented for claims 9 and 10 are applicable to claim 32 and 34 respectively.

Regarding claim 35, a method as recited in claim 34, wherein the calibration profile is a white calibration profile, and further comprising means for correcting the semi-transparent object profile using the black calibration profile (col. 4 line 5 through col. 5, line7).

Regarding claims 36 and 38-40 the arguments analogous to those presented for claims 9, 11 and 12 are applicable to claims 36 and 38-40 respectively.

Regarding claims 48-50 the arguments analogous to those presented for claim 9 are applicable to claims 48-50.

Claims 10, 33 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houchin et al. (U. S. Patent No. 5,047,861) and further in view of MacDonald et al. (U.S. Patent No. 6,195,159).

Regarding claims 10, 33 and 37 (as best understood by the examiner) Houchin does not explicitly address blocking the light for black calibration, however, MacDonald discloses the use of light blocking material for this purpose (col. 12, lines 59-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use MacDonald invention in Houchin,s design to minimize the amount of light incident on the detector.

Claims 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houchin et al. (U. S. Patent No. 5,047,861).

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Regarding claims 42-45, having transparent object as air or as glass is well known in the art and routinely utilized as such. Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to use air or glass as transparent object for calibration purposes.

Regarding claims 46 and 47 smoothing by filtering (multirate), extrapolation and decimation is well known and routinely practiced in the art. Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to use such techniques for smoothing and calibration.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipoor whose telephone number is (703)306-4037. The examiner can normally be reached on Mon.-Thurs. from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles, Sr. can be reached on (703)305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Houshang Safaipoor  
Patent Examiner  
Art Unit 2622  
August 6, 2004

  
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